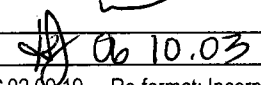


Date: Tuesday, 10/3/2006 2:46:04 PM
 User: Kim Johnston

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	DUAL MIRROR ASSEMBLY
Job Number :	28814		
Estimate Number :	12278		
P.O. Number :	N/A	Part Number :	D206558043
This Issue :	10/3/2006	S.O. No. :	N/A
Prsht Rev. :	NC	Drawing Number :	D206-558 PG4-6/D2066
First Issue :	N/A	Project Number :	N/A
Previous Run :	26510	Drawing Revision :	C/B
		Material :	N/A
Written By :		Due Date :	10/12/2006
Checked & Approved By :	 06.10.03		
Comment :	Est. G02.09.19 Re-format; Incorporated D2066 KJ		

Qty: 5 Um: Each

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
----------------	------------------------------	----------------------

1.0	DC	DOCUMENT CONTROL
-----	----	------------------



(5)

Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-558-043 CHG005

KJ 06.10.04

2.0	D2011101	Mirror 6"
-----	----------	-----------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Mirror 6"

Pick:

Qty	Part Number	Description	Batch
2	D2011-101	Mirror Ass'y 6"	B 27163

B 27163

✓

3.0	D2052	Bracket
-----	-------	---------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Bracket

Batch B 17216

✓

4.0	D2054	Bushing - Delrin
-----	-------	------------------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Bushing - Delrin

Batch B 20037

✓

5.0	D2055	Clamp
-----	-------	-------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Clamp

Batch B 16712

✓

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
	12							

NOTE: Date & initial all entries

Date: Tuesday, 10/3/2006 2:46:05 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DUAL MIRROR ASSEMBLY

Job Number: 28814

Part Number: D206558043

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

D2056

Bell Crank Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Bell Crank Assembly

Batch B26524

✓

7.0

AN960JD10

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 20.0000 Each(s)

Washer

Pick:

Qty Part Number Description Batch

4 AN960JD10 Washer M100743

✓

8.0

MS21042L3

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Nut

Pick:

Qty Part Number Description Batch

2 MS21042L3 Nut M101917

or MS21042-3

✓

9.0

MS27039118

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Screw

Pick:

Qty Part Number Description Batch

2 MS27039-1-18 Screw M12307

✓

10.0

M304TR0500W035

304 RD Tube .500 x .035W



Comment: Qty.: 2.8000 f(s)/Unit Total : 14.0002 f(s)

304 RD Tube .500 x .035W

304/316 SS Seamless Tube

(Ref. QSI 017 4.1.1.2) as per Dwg D2066 using punch Jig DT8012.

Identify as D2066.

Batch: M102459

Deburr and Polish

Note: Punch 1 end only at this time.

M 102958 SB 07/01/08

⑤

M102958 / M102742 (x2)

✓

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2065 PAR #: NIA Fault Category: Prod / FAB ASS. Mfg. Esmall NCR: (Yes) No DQA: 9 Date: 07/01/31
D206-558-043 QA: N/C Closed: _____ Date: _____

NCR: <u>28814</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng				Sign & Date
07/01/08	12	5 parts of D2065 were scup hole at the wrong angle opposite of Dwg. Human error.	<u>051042</u>	Scrap + destroy + replace.	<u>SB</u> <u>07/01/08</u>	<u>07/01/08</u>	<u>051042</u>	<u>07/01/08</u>

NOTE: Date & initial all entries

Date: Tuesday, 10/3/2006 2:46:05 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DUAL MIRROR ASSEMBLY

Job Number: 28814

Part Number: D206558043

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

11.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

Punch 1/2" OD x .035 " Wall

Slide on parts D2052, D2055, D2056, D2054 as per Dwg D206-558

Note orientation of belcrank and order of parts.

Punch other end to length (28.62") as per Dwg D2066

Use template DT8054

FF 04-12-10 5

12.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Flatten the ends on Hydraulic press using DT8545

Bend per Dwg D2066 using template D2066T1

Deburr

Drill 3/16" Dia holes per D2066T1 template and Dwg D2066

Deburr holes

Assemble remaining parts as per Dwg D206-558

ml 07/01/29 (XS)

FF 07-01-15 5

FF 04-02-10 5

13.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

ml 07/01/29 (S)

14.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

15.0

D2053

Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Bracket

Pick: Packing Kit

Qty Part Number Description Batch

1 D2053 Bracket


616710 ✓

FF 07/01/29 (S)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D206-558-043 PAR #: N/A Fault Category: Prod/Landing Gear NCR: (Yes) No DQA: S Date: 07/01/15
 QA: N/C Closed: _____ Date: _____

NCR: 28814		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/01/15	12	The 45° bend are ok but when bending them it does not align align together (2 scrap)	Q51012	Take hardware off -destroy tube and replace. Retrain on symmetrical bends.	07/01/15 FF	07/01/29	Q51012	07-01-15
								

NOTE: Date & initial all entries

Date: Tuesday, 10/3/2006 2:46:05 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DUAL MIRROR ASSEMBLY

Job Number: 28814

Part Number: D206558043

Job Number:



Seq. #:

Machine Or Operation:

Description :

16.0

D2067

Connector



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Connector

Pick: Packing Kit

Qty Part Number

Description

Batch

1

D2067

Connector

B20875 ✓

17.0

D2071

Cable Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Cable Assembly

Pick: Packing Kit

Qty Part Number

Description

Batch

1

D2071

Cable

B26525 ✓

18.0

AN34A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 20.0000 Each(s)

Bolt

Pick: Packing Kit

Qty Part Number

Description

Batch

4

AN3-4A

Bolt

M103287 ✓

19.0

AN5261032R9

Screw



Comment: Qty.: 4.0000 Each(s)/Unit Total : 20.0000 Each(s)

Screw

Pick: Packing Kit

Qty Part Number

Description Batch

4

AN526-1032R9

Screw

or AN526C1032R9

M12241 ✓

20.0

AN960JD10L

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 20.0000 Each(s)

Washer

Pick: Packing Kit

Qty Part Number

Description Batch

4

AN960JD10L

Washer

M10129K ✓ Box/Qty/30(5)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 10/3/2006 2:46:05 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DUAL MIRROR ASSEMBLY

Job Number: 28814

Part Number: D206558043

Job Number:



Seq. #:

Machine Or Operation:

Description :

21.0

MS21919DG5

Clamp



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Clamp

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21919DG5 Clamp

or MS21919WDG5

~~M17864~~ ~~M16984~~
M17864 ✓

22.0

MS354899

Grommet



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Grommet

Pick: Packing Kit

Qty Part Number Description Batch

1 MS35489-9 Grommet

~~M17864~~ M19619 ✓

EP 07/01/30 (5)

23.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

24.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: LEV:0

EP 07/01/30 (5)

EP 07/01/30

25.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

EP 07/01/31

Job Completion



U 07/01/31

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

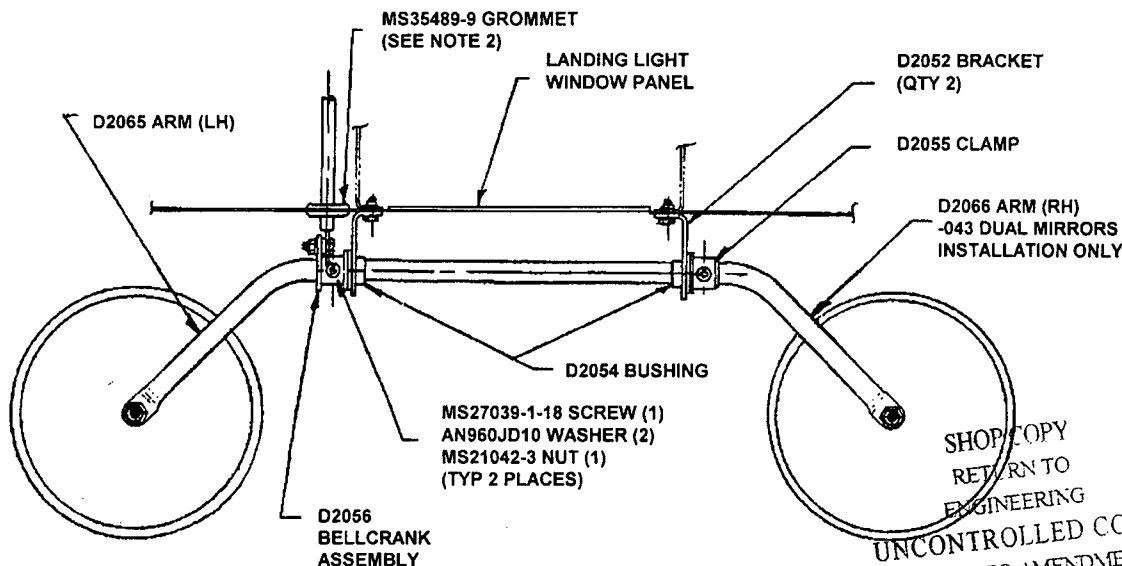
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

3.0 CARGO MIRROR INSTALLATION

Install the Cargo Mirror as follows:

1. Install D206-558-041/-043 cargo mirror assembly using AN3-4A bolts and AN960JD10L washers. Pickup existing anchor nuts in 4 places.
2. Install D2067 connector onto D2056 bellcrank assembly to locate hole for MS35489-9 grommet. With the mirror in the deployed position, mark and drill $\varnothing 0.125$ " (3.2mm) hole in landing light window panel where the grommet should be located. Open pilot hole to $\varnothing 0.563$ " (14.3mm). Install grommet.
3. Install D2053 bracket using AN526-1032R9 screws. Pickup on existing anchor nuts.
4. Position D2071 cable as shown. Install MS21919DG5 clamps using AN526-1032R9 screws where required. Pickup existing rivnuts or anchor nuts if available.
5. Install D2071 control cable using D2067 connector. Connector should rotate freely in bellcrank when MS21042-3 nut is torqued and cable clamped



**Figure 2: – View A: Looking Aft.
(D206-558-043 Mirror Shown)**

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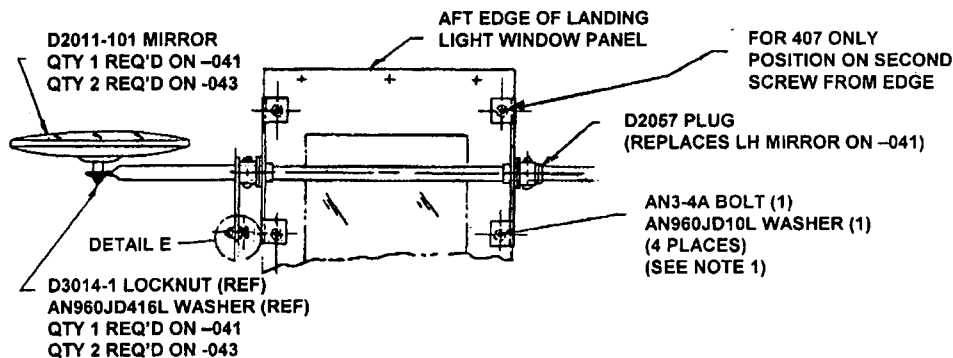


Figure 3: - View C: Looking Down on Mirror Installation
(D206-558-041 Mirror Shown)

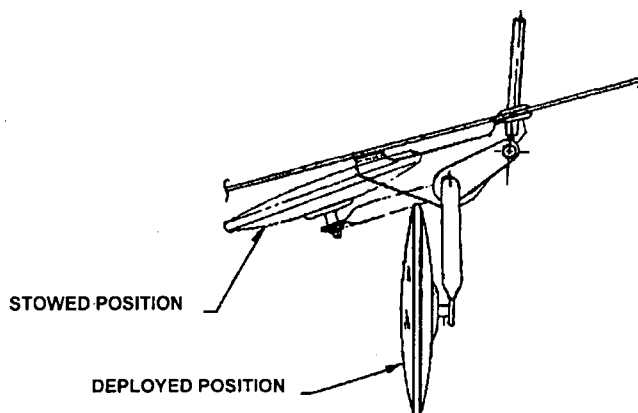


Figure 4: - Detail D: Looking from Side on Mirror Installation
(D206-558-041/-043 Mirror Shown)

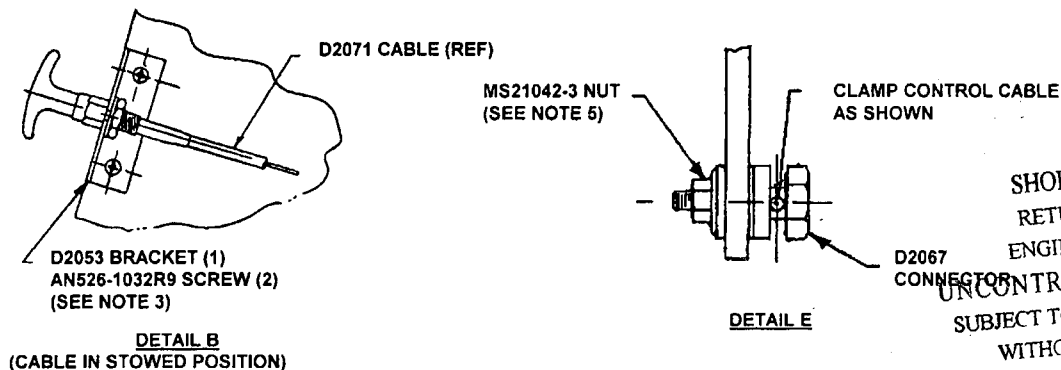


Figure 5: - Details B and E on Mirror Installation
(D206-558-041/-043 Mirror Shown)

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4.0 WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D206-558-041 Bell 206A/B/L/L1/L3/L4 Bell 407	2.4 lb 1.09 Kg	+5.0 in +0.13 m	+12.0 in-lb +0.14 m-Kg	+14.8 in +0.38 m	+35.5 in-lb +0.41 m-Kg
D206-558-043 Bell 206A/B/L/L1/L3/L4 Bell 407	3.0 lb 1.36 Kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-Kg	+14.8 in +0.38 m	+44.4 in-lb +0.52 m-Kg

5.0 WEIGHT AND BALANCE

Qty -041	Qty -043	Part Number	Description
X		D206-558-041	SINGLE CARGO MIRROR ASSEMBLY
	X	D206-558-043	DUAL CARGO MIRROR ASSEMBLY
1	2	D3014-1	* LOCKNUT
1	1	D2071	CABLE ASSEMBLY
2	2	D2054	BUSHING
1	1	D2067	CONNECTOR
	1	D2066	ARM
1		D2065	ARM
1		D2057	PLUG
1	1	D2056	BELLCRANK ASSEMBLY
1	1	D2055	CLAMP
1	1	D2053	BRACKET
2	2	D2052	BRACKET
1	2	D2011-101	MIRROR ASSEMBLY
4	4	AN3-4A	BOLT
4	4	AN526-1032R9	SCREW
1	2	AN960JD416L	* WASHER
4	4	AN960JD10	WASHER
6	6	AN960JD10L	WASHER
3	3	MS21042-3	NUT (or MS21042L3)
2	2	MS21919DG5	CLAMP
2	2	MS27039-1-18	SCREW
1	1	MS35489-9	GROMMET

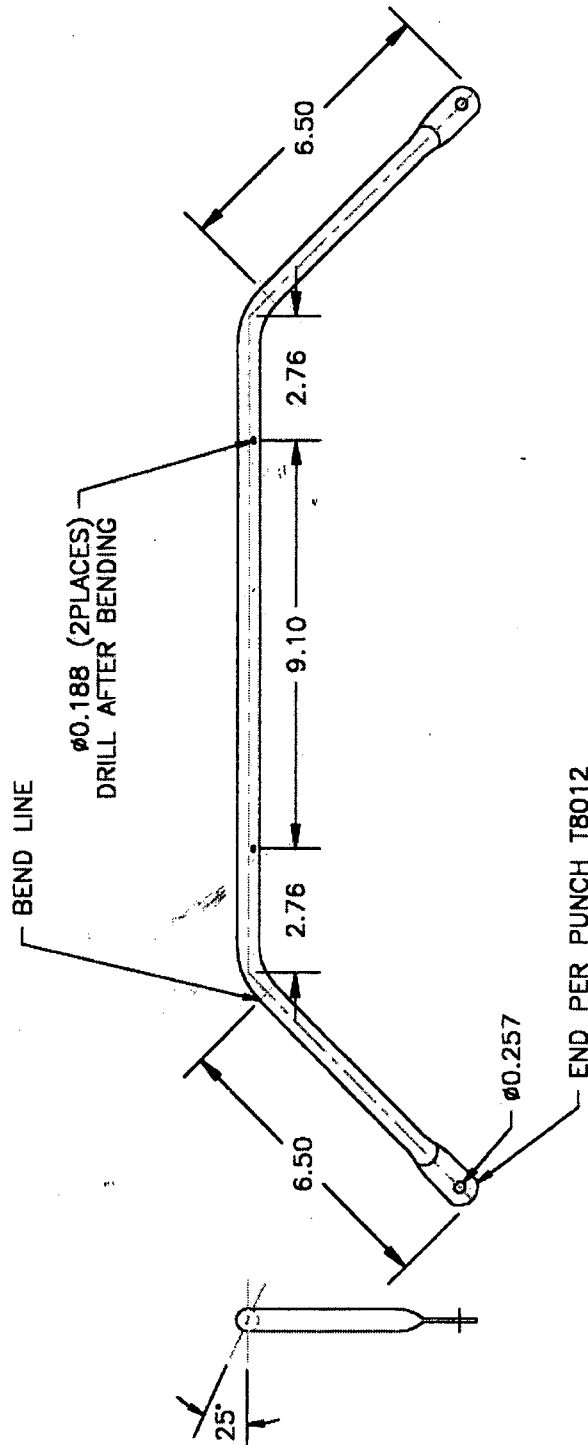
* INCLUDED AS PART OF D2011-101 MIRROR ASSEMBLY

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DART



DESIGN	DRAWN BY	DART AEROSPACE LTD VICTORIA INTERNATIONAL AIRPORT, CANADA	
B WILLIAMS	B WILLIAMS	DRAWING NO.	REV. B
CHECKED <i>BW</i>	APPROVED <i>GA</i>	D2066	SHEET 1 OF 1
DATE	TITLE	SCALE	
92.03.12	ARM	1:4	
B	96.02.06	RE-DESIGNED	



D2066 CUT LENGTH 28.62
NOTE:
ADD D2052, D2055, D2056
D2054 TO ARM BEFORE
ENDS ARE PUNCHED AND
ARM IS BENT

MATERIAL: 304/316 SS 1/2 OD X 0.035 WALL

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